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Applicants: Betty A. Diamond and Bruce T. Volpe

Appn. No.: 10/574,994

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## Amendments to the Claims:

Please amend Claims 23, 46 and 51 as set forth below.

1-22. (Canceled)

23. (Currently amended) A method of inhibiting progression of cognitive dysfunction in a mammal diagnosed as exhibiting or as being at risk for lupus-induced cognitive dysfunction, the method comprising treating the mammal with an agent that prevents binding of an anti-ds-DNA antibody to an NR2 subunit of an N-methyl-D-aspartate (NMDA) receptor of a neuron in the brain, wherein the agent comprises amino acid sequence X1-Trp-X1-Tyr-X2 (SEQ ID NO:1), wherein each of X1 independently represents Asp or Glu, and X2 represents Gly or Ser.

24. (Canceled)

25. (Original) The method of claim 23, wherein the neuron is in the hippocampus.

26-44. (Canceled)

45. (Previously presented) The method of claim 23, wherein the agent is administered to the brain of the mammal.

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46. (Currently amended) A method of determining whether a patient is at risk for lupus-induced cognitive dysfunction, the method comprising determining whether the patient has anti-NR2 antibodies, wherein the presence of anti-NR2 antibodies indicates that the patient is at risk for lupus-induced cognitive dysfunction, and if the patient is at risk for lupus-induced cognitive dysfunction, treating the patient with an agent that prevents binding of an anti-NR2 antibody to an NR2 subunit of an N-methyl-D-aspartate (NMDA) receptor of a neuron in the brain, wherein the agent comprises amino acid sequence X1-Trp-X1-Tyr-X2 (SEQ ID NO:1), wherein each of X1 independently represents Asp or Glu, and X2 represents Gly or Ser.

47. (Previously presented) The method of claim 46, wherein the cerebrospinal fluid is tested for the presence of anti-NR2 antibodies.

48. (Previously presented) The method of claim 46, wherein the blood is tested for the presence of anti-NR2 antibodies.

49-50. (Canceled)

 (Currently amended) The method of claim 46, wherein the <u>agent peptide or</u> mimetic comprises Asp-Trp-Glu-Tyr-Ser (SEQ ID NO:1).

52-53. (Canceled)

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- 54. (Withdrawn) The method of claim 23, wherein the agent comprises D-amino acids.
- 55. (Previously presented) The method of claim 23, wherein the agent comprises Asp-Trp-Glu-Tyr-Ser (SEO ID NO:1).
- 56. (Previously presented) The method of claim 23, where the mammal is diagnosed as exhibiting lupus-induced cognitive dysfunction.
- 57. (Previously presented) The method of claim 23, where the mammal is diagnosed as being at risk for lupus-induced cognitive dysfunction.